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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| 10/02/1997 | 10/02/1997 | LOWE, ROBERT LEE/JOHN R. DECHER | 10/02/1997 - P 4039 |

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EXAMINER

10/02/1997

ART UNIT

PAPER NUMBER

10/02/1997

DATE MAILED: 10/02/1997

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| | | |
|------------------------------|--------------------------------------|---|
| Office Action Summary | Application No. 08/667,677 | Applicant(s) Harry Sun et al. |
| | Examiner DIANE MIZRAHI | Group Art Unit 2307 |

Responsive to communication(s) filed on Jun 21, 1996

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-14 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-14 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on Jun 21, 1996 is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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III. DETAILED ACTION

1. Claims 1-14 are presented for examination.
2. The information disclosure statements filed on 01/30/97 complies with the provisions of MPEP § 609. They have been placed in the application file, and the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 112

3. Claims 1-6 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Examiner was unclear as to where the "detection of data modification to a subset of data" is being done (Claim 1, line 11 and Claim 11, line 12). It is unclear as to where the detection is being done -- at a master site or at the replicating site? Examiner was unable to determine what the invention entails because the "detecting" was not clearly defined in the specification. The lack of clarity of this term provides an undue burden for the Examiner and to enable a person of ordinary skill in the art to which it pertains, or which it is most

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clearly connected, to make and/or use the invention. The meets and bounds are not clearly established.

Dependent claims not specifically rejected are rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tirfing et al. (5,129,082 and Tirfing hereinafter).

6. Regarding Claim 7, Tirfing teaches a system and associated method comprising of sites for specifying how data is replicated.

The system and associated method replicating data as taught or suggested by Tirfing includes:

mapping a subset of data (i.e. files containing data) that resides in a set of formatted data to an object group (i.e. subgroup directory) (Figure 2); mapping object group to one or more sites (Figure 2) and creating replicas of data subset to one

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or more sites (i.e. into Database A and B files) (Figure 4b, #280 and 290).

7. Regarding Claim 8, the limitations of this claim have been noted in the rejection of claim 7 above. In addition, Tirling disclosed two subsets of data (i.e. Source 1 and Source 2) corresponding for a first group of formatted data (i.e. sub-directory) and a second group corresponding to a second group of formatted data (Figure 2).

8. Regarding Claim 9, Tirling discloses maintaining a set of destinations to which subset of data is replicated (i.e. Databases B and C (Figure 4C, # 290 and 310)).

9. Regarding Claim 10, Tirling discloses mapping a subset of data to an object group (Figure 7); and maintaining an object groups table (Figure 3C) and maintaining a replicated objects table (i.e. tables in the new group database).

Allowable Subject Matter

10. Claims 1-6 and 11-14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.

11. The following is an Examiner's statement of reasons for the indication of allowable subject matter: Applicant's particular

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system and method of replicating data by mapping between formatted subsets of data and specifying the data replication sites of the object groups, detecting a data modification to the data subset and propagating the data modification to the replication sites of the object groups, was not suggested over prior art.

These limitations in conjunction with the other limitations of the dependent and independent claims were not shown by, would not have been obvious over, nor would have been fairly suggested by the prior art made of record.

12. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Drawings

13. Since allowance subject matter has been indicated, Applicant is encouraged to submit, formal drawings in response to this Office action. The early submission of formal drawings will permit the office to review the drawings for acceptability and to resolve any informalities remaining therein before the

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application is passed to issue. This will avoid possible delay in the issue process.

14. As allowable subject matter has been indicated, Applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CRF 1.111(b) and MPEP section 707.07(a).

Other Prior Art Made of Record

15. A. Bapat (5,291,583) discloses an automatic storage of persistent asn.1 objects in a relational schema;

B. Kanfi (5,559,991) an incremental computer file backup using check words;

C. Dao et al. (5,596,744) disclosed an apparatus and method for providing users with transparent integrated access to heterogeneous database management systems;

D. Hoover et al. (5,560,005) disclosed a method and system for object-based relational distributed databases; and

E. Marks (5,617,364) disclosed an apparatus and method for performing the backup of a primary database using a back up database.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

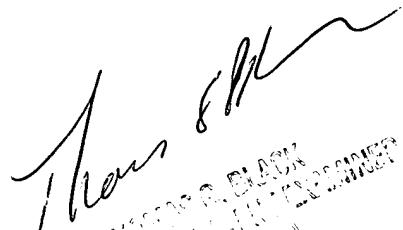
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Points of Contact

17. Any inquiry concerning this communications from the examiner should be directed to Diane Mizrahi whose telephone number is (703) 305-3806. The examiner can normally be reached on Monday to Thursday from 7:30 AM. to 5:00 PM.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-9707. The fax phone number for this group is (703) 308-9051.


Diane Mizrahi
Patent Examiner


Thomas Black
Supervisory Patent Examiner

October 20, 1997